

# USGBC Green School Buildings

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U.S. Green Building Council – Chicago (Illinois) Chapter



# THE VISION: GREEN SCHOOLS WITHIN A GENERATION



**55** million students

and **5** million faculty

**20%** of America's population

spend over

**\$35,000,000,000**

in tax dollars annually



# air that is unfit to breathe

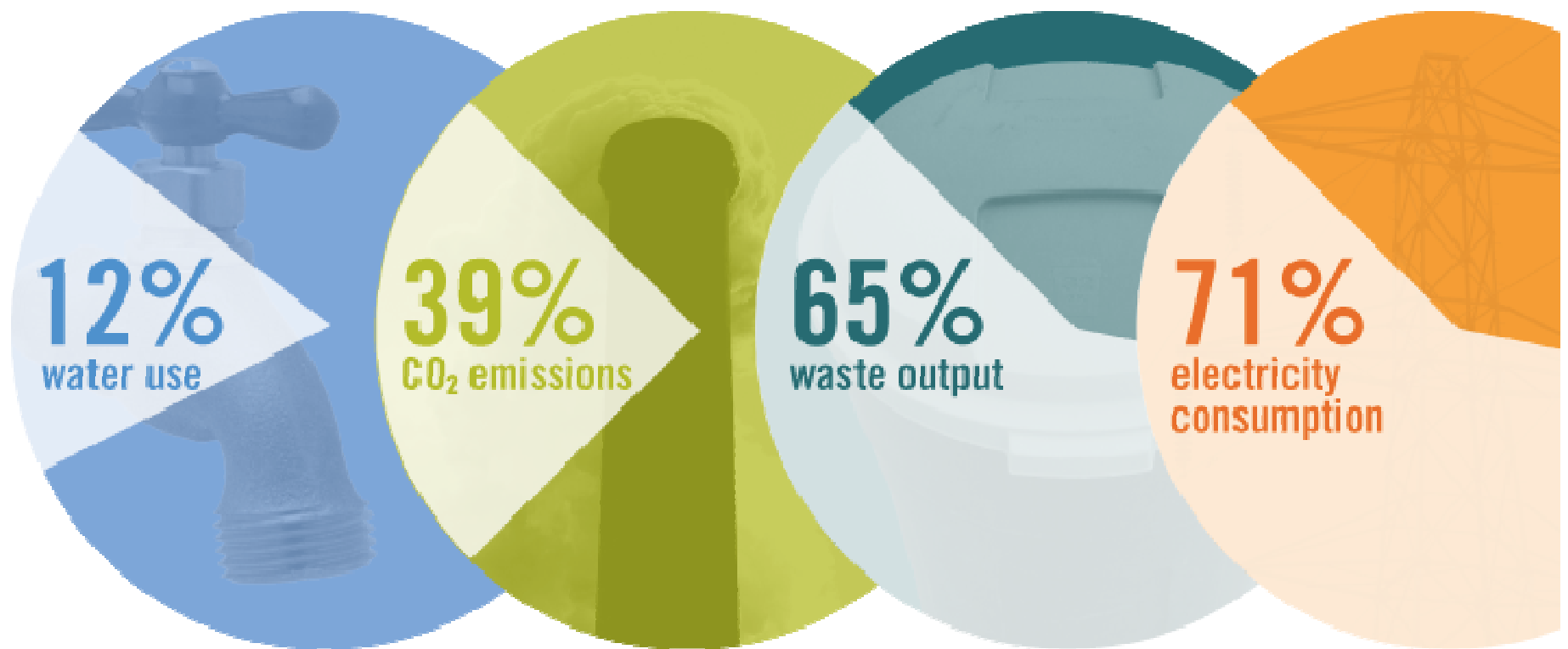
AFT's 2008 Building Minds Minding

Building report cites a GAO study showing  
15,000 U.S. schools suffer from indoor air  
that is unfit to breathe.

15  
THOUSAND



## U.S. Building Impacts:



**ENERGY  
USE**

**30-50%**

**CARBON  
EMISSIONS**

**35%**

**WATER  
USE**

**40%**

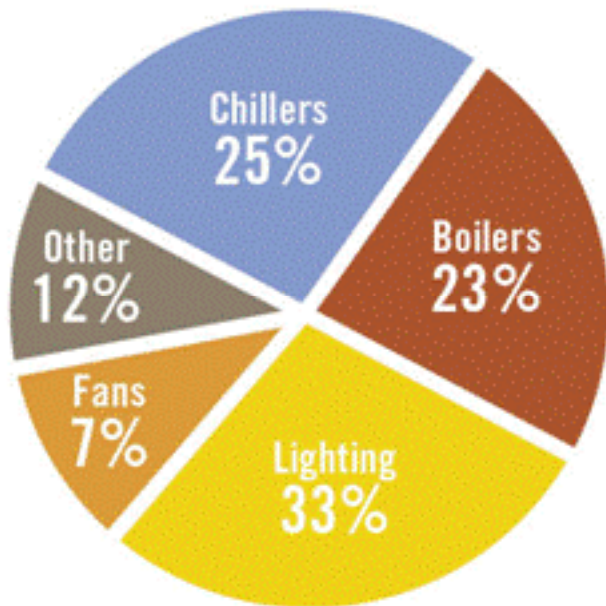
**SOLID  
WASTE**

**70%**

**Average Savings of Green Buildings**



# Understanding Energy Use in Schools



This will vary depending on your climate region.

How much does your school spend each year on energy?

**Elementary School:**

**\$70,000 to \$150,000**

**Middle School:**

**\$100,000 to 200,000**

**High School:**

**\$200,000 to \$650,000**

## Total U.S. Schools

**97,382** Public K-12 Schools

**28,384** Private Schools

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**≈ 126,000** Existing Schools

**spend over**

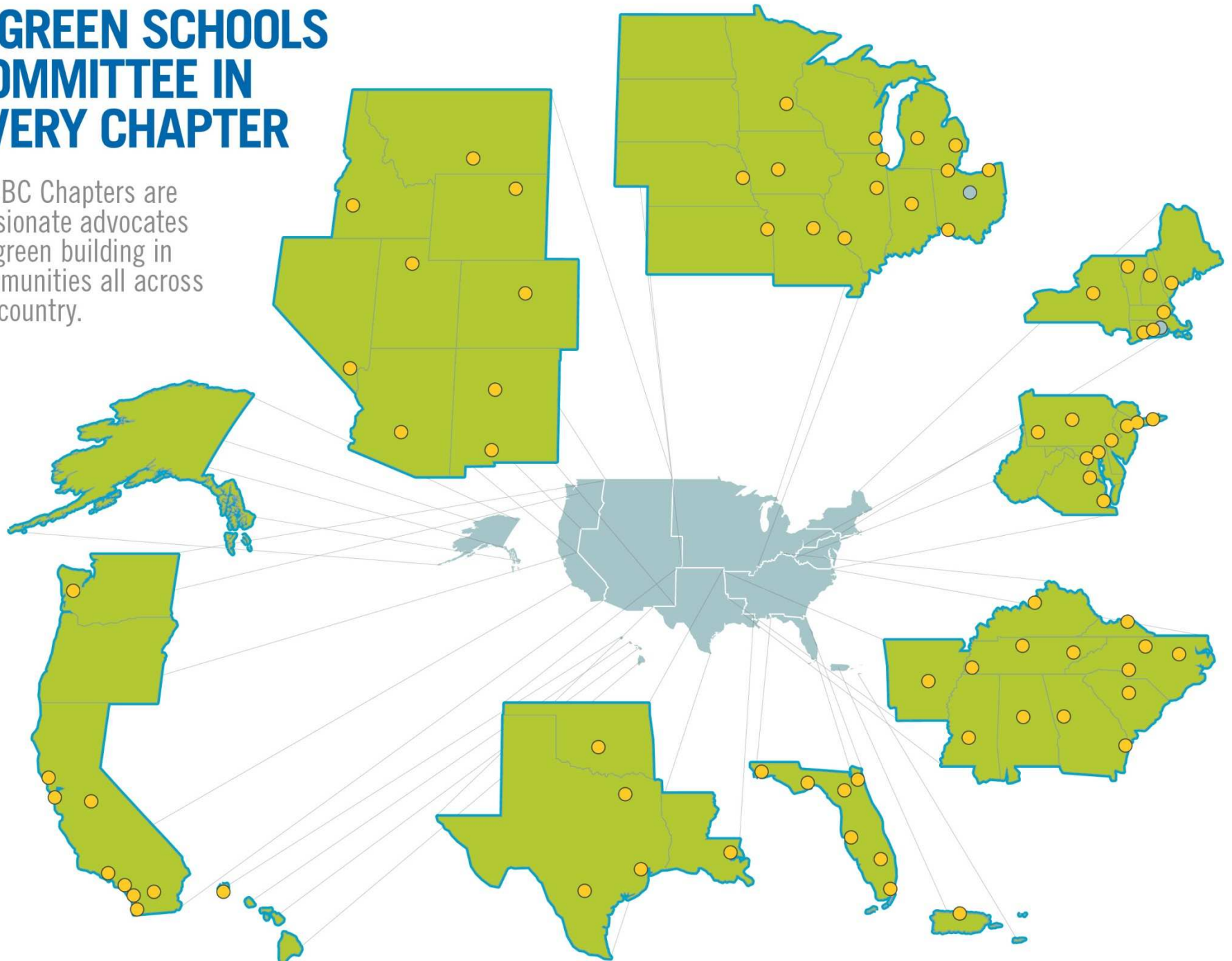
**\$6,500,000,000**

**on retrofit, modernizations  
and additions of  
existing buildings in 2008**

Source: School Planning and Management's 2009 School Construction Report

# A GREEN SCHOOLS COMMITTEE IN EVERY CHAPTER

USGBC Chapters are passionate advocates for green building in communities all across the country.



# 2010 Key Priorities

- *Green* School Buildings
- Engage Educators

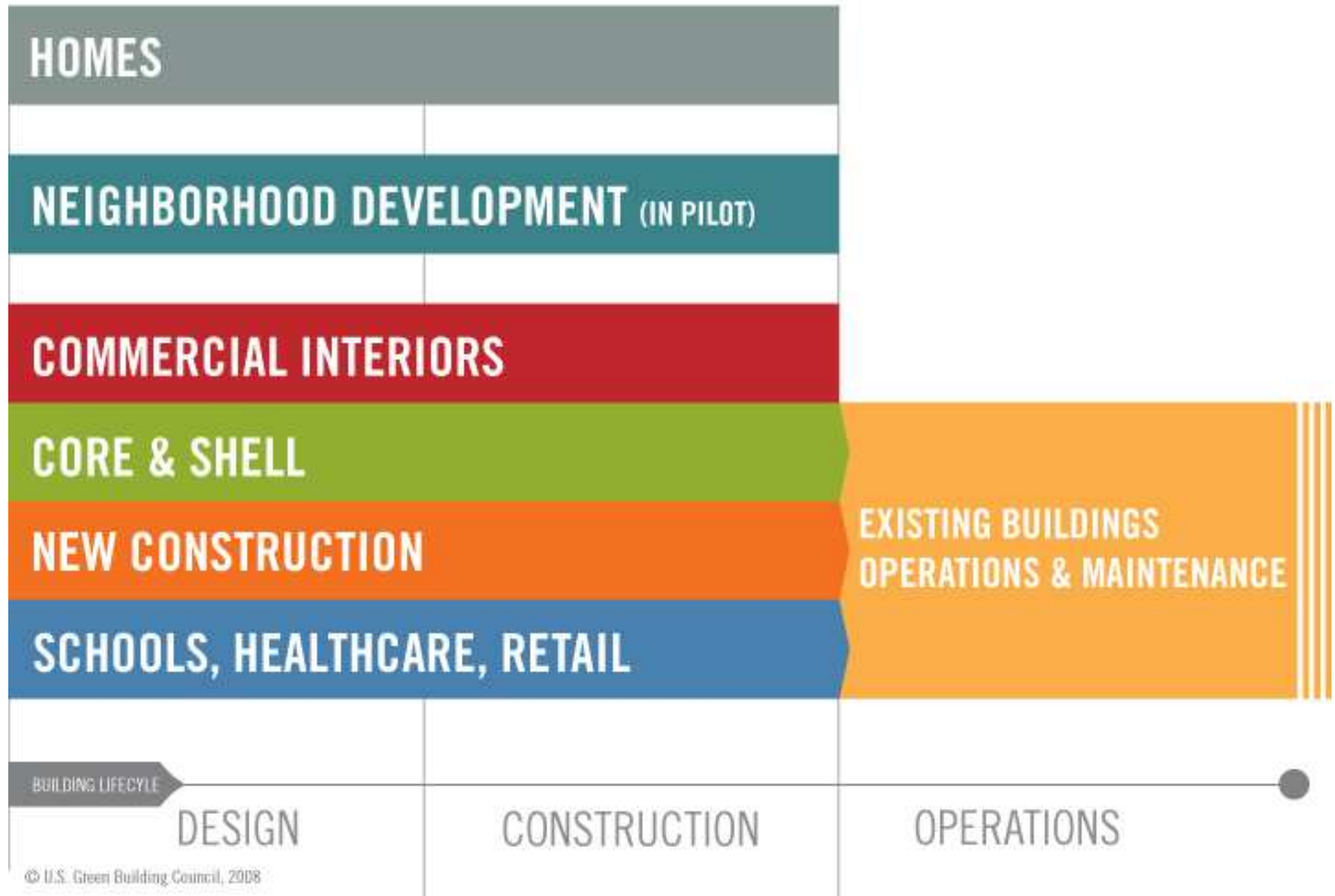
## **Sub- committees**

- **Advocacy & Training**
- **Outreach & Program  
Development**
- **Curriculum**
- **Adopt-A-School**
- **Legislation & Tracking**





# LEED address the complete lifecycle of buildings:







## Cross-Functional Team

ENGINEERS OPERATIONS AND MAINTENANCE TEAMS  
STUDENTS PRINCIPALS OTHER FACULTY AND ADMIN  
TEACHERS ENVIRONMENTAL HEALTH AND SAFETY STAFF  
GROUNDSKEEPERS CAPITAL PLANNING STAFF GR  
SECURITY/PARKING/TRANSPORTATION STAFF SECURITY  
CUSTODIAL TEAM BUILDING MANAGERS CUSTODIAL  
SUPERINTENDENTS STUDENTS SUPERINTENDENTS  
FACILITIES MANAGERS AND THEIR TEAMS FACILITIES MANAGERS  
ENGINEERS OPERATIONS AND MAINTENANCE TEAMS  
STUDENTS PRINCIPALS OTHER FACULTY AND ADMIN

## **LEED EB Process**

**Optimize water and  
energy efficiency**

- **Water Consumption  
Reduction**
- **Energy Star Rating**
- **Building Operations  
Plan and Set Point  
Schedules**

## **LEED EB Process**

### **Sustainable Practices**

- **Indoor Air Quality & Ventilation Effectiveness**
- **Sustainable Landscape & Site Maintenance**
- **Ozone Protection – Refrigerant Management**
- **Mercury-Containing Lamp Assessment**

## **LEED EB Process**

### **Establish Sustainable Policies**

- **Green Cleaning**
- **Integrated Pest  
Management**
- **Sustainable  
Purchasing**
- **Recycling & Solid  
Waste**

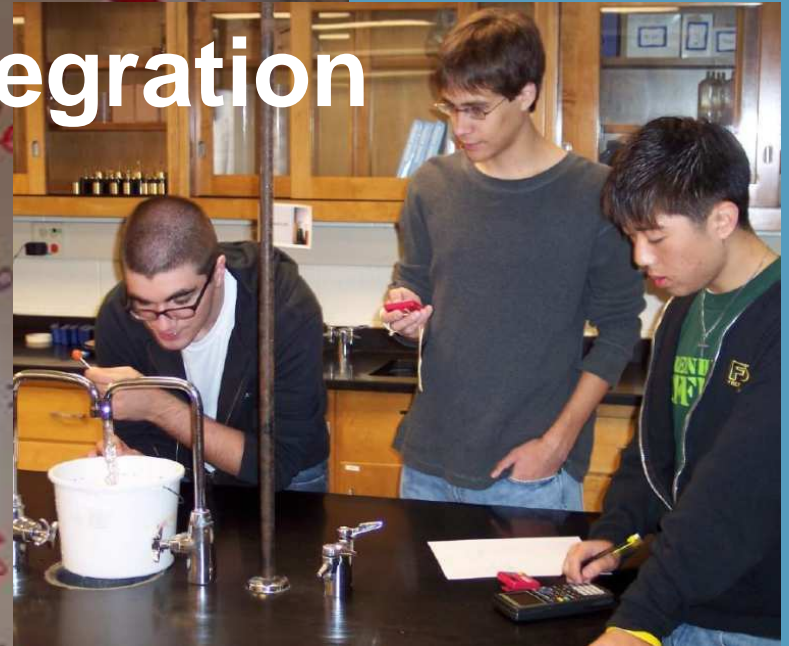
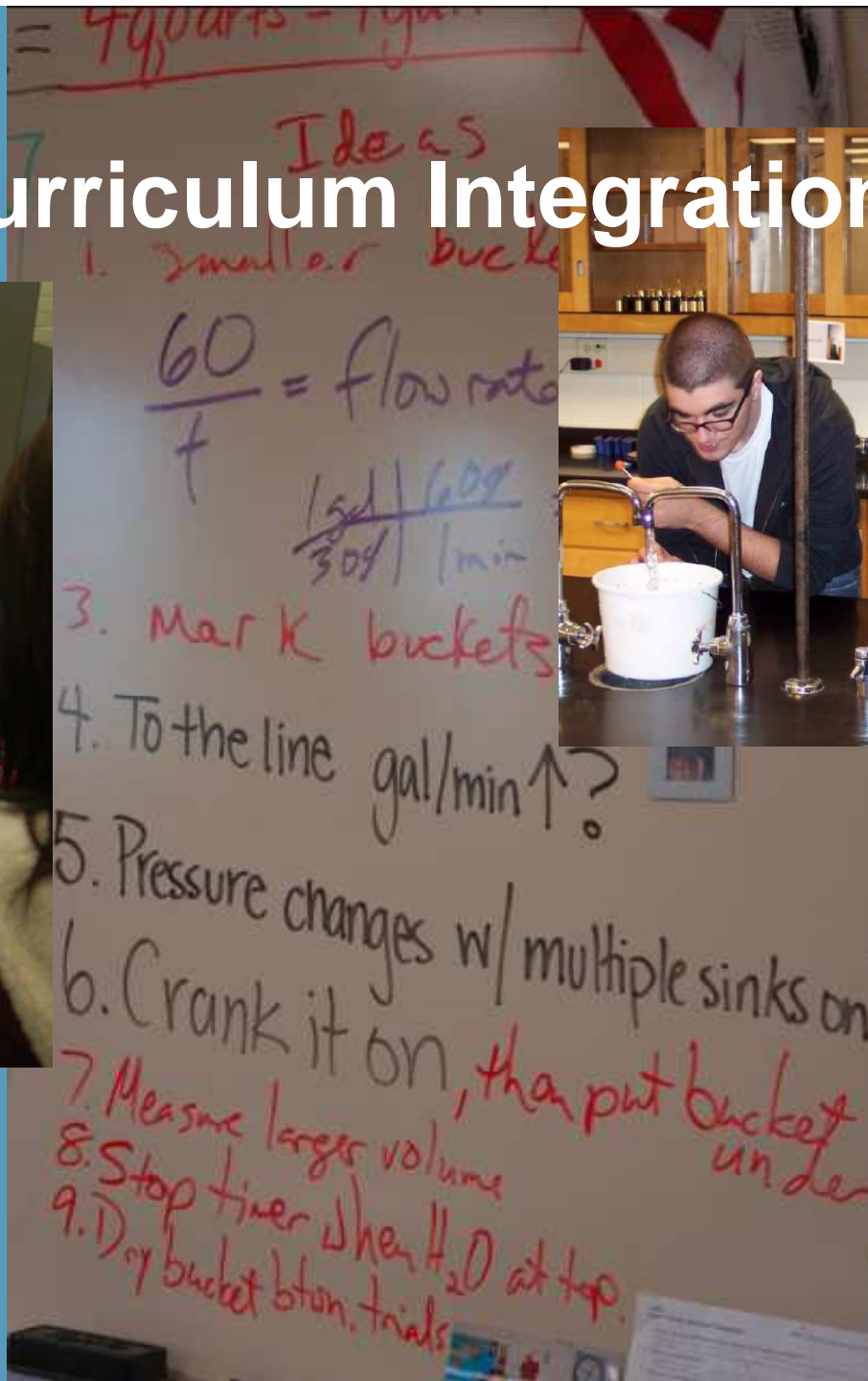
## **LEED EB Process**

### **Performance Measurement**

- **Track Waste Diversion**
- **Track Sustainable  
Purchasing**
- **Compile Water Meter  
Readings**
- **Test & Balance Outside  
Air, Exhaust Fans**
- **Conduct Transportation  
& Comfort Surveys**

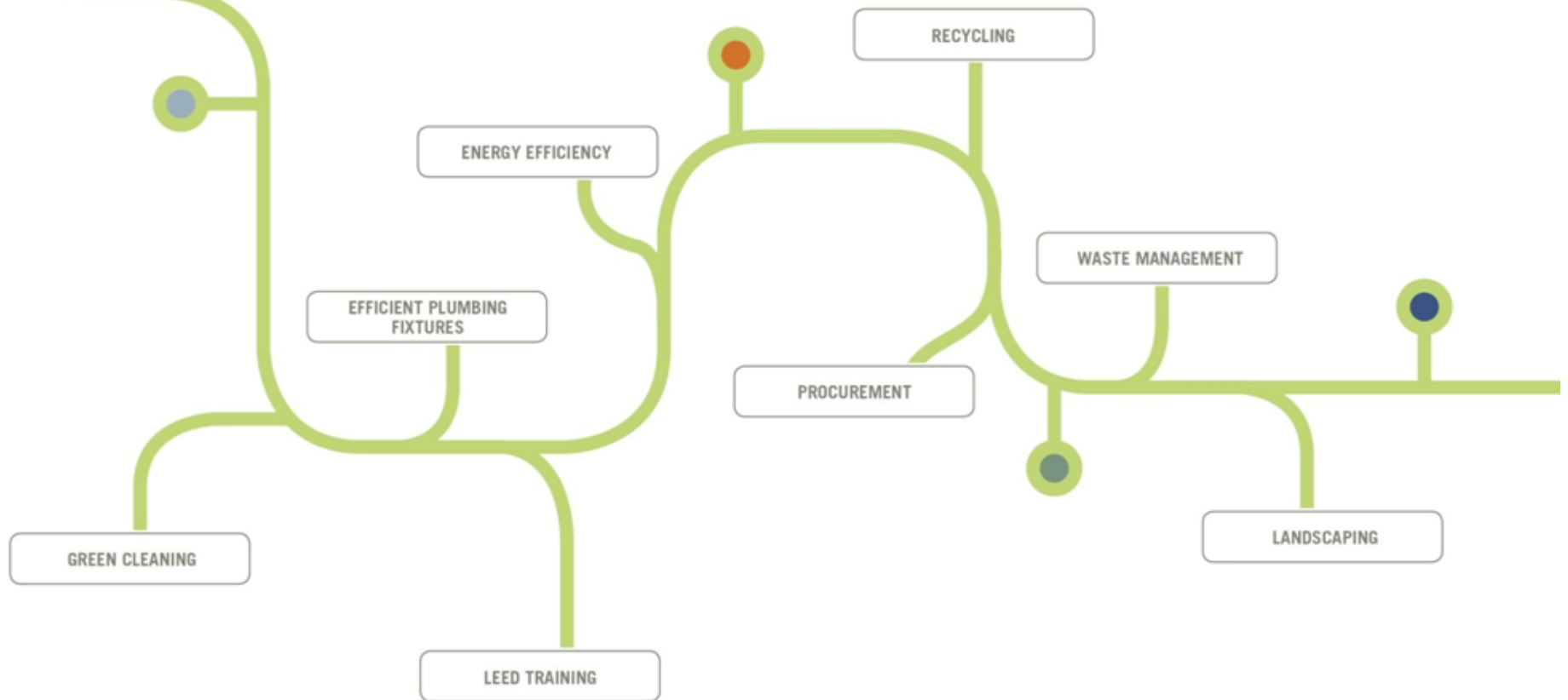


# Curriculum Integration



Stevenson High  
School,  
Lincolnshire Illinois

# LEED for Existing Buildings: O&M is a journey, not a destination





# How to get started



# **TOOLS & RESOURCES**

# Tools

- LEED V3
- Reference guides
- Project checklists
- Case studies and project profiles)
- EB Toolkit (Nov. 2009)
- GreenSchoolBuildings.org
- USGBC.org

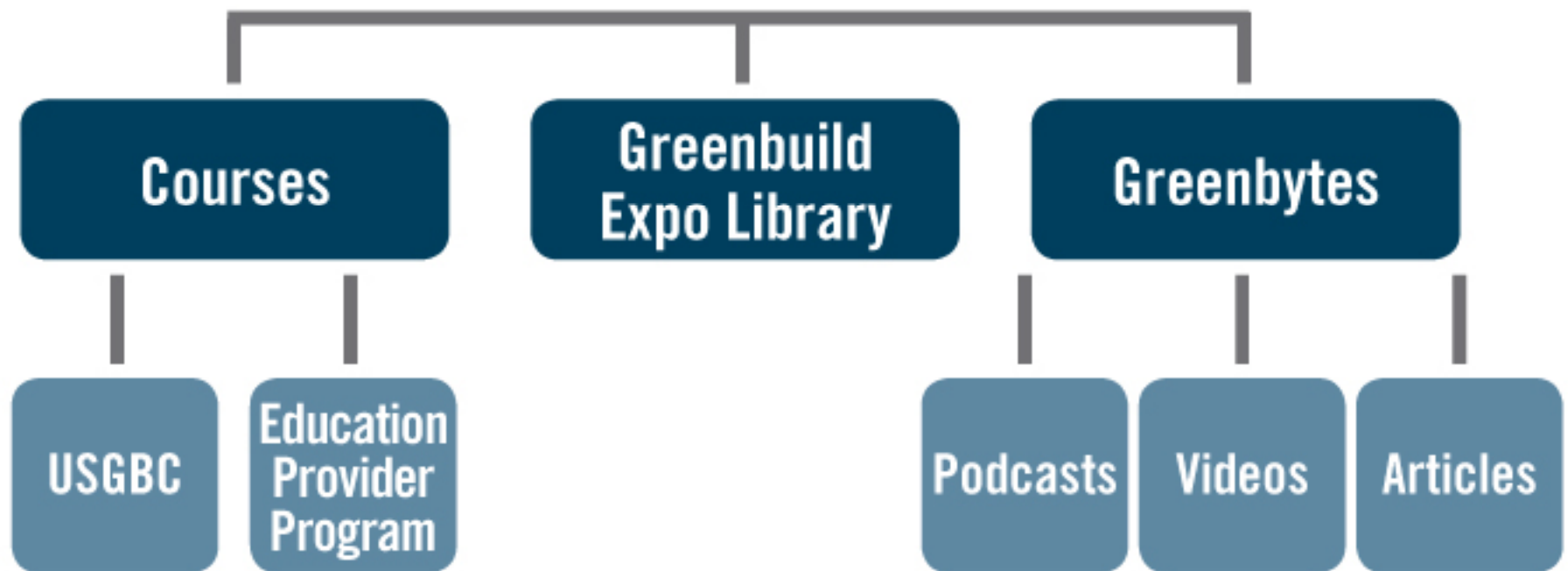


**LEED for Existing Buildings: Operations & Maintenance  
Existing Schools Toolkit**

**THE PAID-FROM-SAVINGS  
GUIDE TO GREEN  
EXISTING BUILDINGS  
EXECUTIVE SUMMARY**



# GREEN BUILD<sup>(365)</sup>



# How to get started

- ☒ Visit [www.greenschoolbuildings.org](http://www.greenschoolbuildings.org)
- ☒ Become familiar with LEED for Existing Buildings: Operations and Maintenance
- ☒ Pass a green schools resolution
- ☒ Join your local Green Schools Advocacy Committee
- ☒ Become a USGBC member



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